

**REMARKS/ARGUMENTS**

Reconsideration of this application and entry of the foregoing amendments are respectfully requested.

At the outset, the undersigned wishes to express appreciation to the Examiner for granting the interview of this date. The undersigned understands that the Examiner will issue a Summary of that interview. The undersigned will file any responsive paper (e.g., Statement) that may be necessary upon receipt of the Summary.

Claim 19 has been cancelled without prejudice. Claim 39 has been revised to define the invention with additional clarity. Specifically, claim 39 has been revised so as to be drawn to a method of stimulating cytotoxic T lymphocyte proliferation rather than to a method of producing cytotoxic T lymphocytes. Support for the amendment to claim 39 is found, for example, at page 4, line 28 to page 5, line 5, taken with page 13, lines 4-9.

New dependent claims 40 and 42 do not raise any new issue as they each recite one of the two options provided for in claim 39 (that is, tumor-derived RNA in the case of claim 40 and pathogen-derived RNA in the case of claim 42). Similarly, new dependent claims 41 and 43 do not raise any new issue as they each recite one of the two options provided for in now cancelled claim 19 (that is, tumor-specific RNA in the case of claim 41 and pathogen-specific RNA in the case of claim 43) (page 2, lines 15-20, and page 6, lines 4-26, make it clear that tumor- and pathogen-derived RNA includes tumor-

and pathogen-specific RNA, respectively). Support for new dependent claim 44 is found, for example, at page 13, lines 4-9.

New claim 45 is drawn to a method of inducing a CTL response. This new claim is not believed to raise any new issues. Step (i) of this method is identical to step (i) of claim 39. Step (ii) of this method reads differently than step (ii) of claim 39 in that in claim 45, the APC produced in the preceding step is contacted with a CD8<sup>+</sup> T cell, thereby producing a CTL response in the CD8<sup>+</sup> T cell. In claim 39, the APC are contacted with lymphocytes comprising CTL, thereby producing CTL that recognize the antigen. As the Examiner likely knows, CD8<sup>+</sup> T cells function as CTL (see page 22, line 6 to page 23, line 5). New claims 46-50 depend from claim 45 and parallel the language of claims 40-44, respectively.

Turning now to the Examiner's specific concerns, it is noted that claim 19 stands rejected under 35 USC 112, first paragraph. Withdrawal of the rejection is submitted to be in order in view of the cancellation of claim 19. The rejection is not believed to be applicable to the newly presented claims for the reasons that follow.

New claims 41, 43, 47, 49, like now cancelled claim 19, make reference to tumor-specific or pathogen-specific RNA. The Examiner contends that the specification does not teach how to separate RNA that is specific to pathogens or tumors from non-specific RNA. It is respectfully submitted that the Examiner's position is not well founded. In fact, the application specifically teaches at least one method by which such separations can be performed:

tumor-specific RNA can be prepared by fractionating tumor-derived RNA using **conventional** subtractive hybridization techniques against RNA from non-tumor cells. Likewise, "pathogen-specific" RNA refers to an RNA sample that, relative to unfractionated pathogen-derived RNA, has a high content of RNA that is preferentially present in the pathogen compared with a non-pathogenic strain of bacteria or virus.

(See page 7, lines 13-20, emphasis added.)

That subtractive hybridization was a conventional technique in the art as of the earliest priority date of the application, April 30, 1996, will be apparent from the following references (copies of which are attached – these documents are listed on the attached PTO 1449 Form which the Examiner is requested to initial and return):

- i) Molecular Biology of the Cell, 3<sup>rd</sup> Ed. (1994) Alberts, et al., (Ed.) Garland Publishing, Inc, New York, NY, page 312, especially figure 7-25.
- ii) U.S. 5,256,536 (issued 26 October 1993), Example 1.

As the Examiner appreciates, while subtractive hybridization could be used, other techniques could also be applied.

In view of the above, it will be clear that preparing tumor- or pathogen-specific RNA would not have required undue experimentation.

At the time of the interview, the undersigned discussed with the Examiner a number of documents predating the effective filing date of the instant application and relating to a variety of "tumor-specific" antigens/encoding sequences. Pursuant to the Examiner's request, copies of those documents are submitted herewith (they are also listed on the attached PTO 1449 Form which the Examiner is, again, requested to initial

and return). The documents make clear the art-recognized scope of the term "tumor-specific".

The Examiner is respectfully requested reconsider and withdraw the rejection under 35 USC 112, first paragraph.

Claims 19 and 39 stand rejection as allegedly representing obviousness-type double patenting over claims 1-14 of USP 6,670,186 in view of the disclosure of '186.

Claims 19 and 39 also stand rejected as allegedly representing obviousness-type double patenting over claims 1-8 of USP 6,387,701 in view of the disclosure of '701.

Additionally, claims 19 and 39 stand rejected as allegedly representing obviousness-type double patenting over claims 1-29 of USP 6,306,388 in view of the disclosure of '388.

While in no way agreeing with the Examiner's assertions, submitted herewith are Terminal Disclaimers that moot the rejections.

This application is submitted to be in condition for allowance and a Notice to that effect is requested.

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Respectfully submitted,

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